

# A METHOD AND SYSTEM FOR FREEZE PROTECTING LIQUID NO<sub>x</sub> REDUCTANTS FOR VEHICLE APPLICATION

## Abstract of Disclosure

A method and system for freeze protecting liquid NO<sub>x</sub> reductants, preferably used in vehicle applications, wherein a liquid NO<sub>x</sub> reductant, carried onboard a vehicle exposed to cold weather conditions, is heated by existing thermal energy generated by fuel compression. The heated fuel heats a potentially frozen reductant and the liquid reductant is supplied to an exhaust gas pipe in front of a catalyst for reducing NO<sub>x</sub> on the surface of the catalyst and catalytically converted into environmentally safe nitrogen and water.

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Figures

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